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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 02/12/2009

Mr. Thomas A. Rhee, Ph.d  
18 Ghiberti  
Irvine, CA 92606

EXAMINER

PATEL, JAGIDISH

ART UNIT

PAPER NUMBER

3693

DATE MAILED: 02/12/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,379	02/02/2001	Thomas A. Rhee		8077

TITLE OF INVENTION: REAL LIFE IMPLEMENTATION OF MODERN PORTFOLIO THEORY (MPT) FOR FINANCIAL PLANNING AND PORTFOLIO MANAGEMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	05/12/2009

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

**HOW TO REPLY TO THIS NOTICE:**

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

**PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590                    02/12/2009

Mr. Thomas A. Rhee, Ph.d  
18 Ghiberti  
Irvine, CA 92606

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

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09/776,379	02/02/2001	Thomas A. Rhee		8077

TITLE OF INVENTION: REAL LIFE IMPLEMENTATION OF MODERN PORTFOLIO THEORY (MPT) FOR FINANCIAL PLANNING AND PORTFOLIO MANAGEMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	05/12/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
PATEL, JAGDISH	3693	705-036000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  
 Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list  
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

## 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee name will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent):  Individual  Corporation or other private group entity  Government

## 4a. The following fee(s) are submitted:

## 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

Issue Fee  
 Publication Fee (No small entity discount permitted)  
 Advance Order - # of Copies \_\_\_\_\_

A check is enclosed.  
 Payment by credit card. Form PTO-2038 is attached.  
 The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

## 5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments or the amount of time you require to complete this form or your suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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7590	02/12/2009			
Mr. Thomas A. Rhee, Ph.d 18 Ghiberti Irvine, CA 92606				EXAMINER PATEL., JAGDISH
				ART UNIT 3693
				PAPER NUMBER DATE MAILED: 02/12/2009

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1191 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1191 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b> 09/776,379	<b>Applicant(s)</b> RHEE, THOMAS A.
	<b>Examiner</b> JAGDISH N. PATEL	<b>Art Unit</b> 3693

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to RCE filed 10/24/08.

2.  The allowed claim(s) is/are 39-41.

3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some\* c)  None of the:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

(a)  including changes required by the Notice of Draftperson's Patent Drawing Review ( PTO-948) attached  
1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_.

(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- 1.  Notice of References Cited (PTO-892)
- 2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_.
- 4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
- 5.  Notice of Informal Patent Application
- 6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_.
- 7.  Examiner's Amendment/Comment
- 8.  Examiner's Statement of Reasons for Allowance
- 9.  Other \_\_\_\_.

**DETAILED ACTION**

1. This communication is in response to amendment filed 10/24/08.

***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/24/08 has been entered.

***Response to Amendment***

3. Claims 39-41 have been allowed after the Examiner's amendment in consultation with the prose inventor, Thomas A. Rhee.

**EXAMINER'S AMENDMENT**

The application has been amended as follows:

Please delete ABSTRACT (lines 10-29) on page 26 of the substitute specification dated 9/29/08 and replace with the following on a separate sheet.

**ABSTRACT**

An investment portfolio management method for rebalancing an investor's securities portfolio based on the specified investment parameters is

provided. The method utilizes a conventional mean-variance efficient portfolio frontier analysis, which is often cited in Modern Portfolio Theory (MPT), one of the major scholarly developments in modern finance, finds its way into actual rebalancing the investor's security portfolio. A new way of constructing market portfolio is also suggested. The method offers an automatic, mathematical solution for asset allocation and cash management in real time, while managing and trading on portfolios of each asset class, e.g. commercial papers, repurchase agreements, money market funds, bonds, stocks, mutual funds, and other derivatives on an automatic mode.

In the claims:

Please amend claim 39, and add new claims 40 and 41 as follows:

Claim 39. A method for portfolio management comprising:

receiving at a computer server from at least one client system associated with an investor, a plurality of investment parameters comprising investment planning horizon, risk tolerance or target risk level, target investment returns, a preferred cash allocation, a strategy of portfolio rebalance, and investment styles based on at least of market value, fundamental or technical criteria, and user-defined securities;

responsive to the receipt of said investment parameters, said computer server sending queries to database server system, thereby selecting a list of initial candidate securities based on one or more received said investment parameters;

receiving at the computer server said list of selected initial candidate securities from the database server;

obtaining at the computer server real time and historical market price data for each of initial candidate securities in the list;

inputting said received real time and historical market price data and investment parameters into a mathematical algorithm stored in the computer server;

generating an optimal investment portfolio, wherein said optimal investment portfolio is generated based upon said real time and historical market price data and said plurality of investment parameters received from said investor and wherein said optimal investment portfolio optimizes risk and return on the portfolio;

retrieving said investor's existing portfolio of a plurality of securities positions in terms of price and the number of shares from a database linked to said computer server;

evaluating by the computer server, said optimal investment portfolio with respect to the return on a domestic market index portfolio, wherein said domestic market index portfolio is constructed as an optimal linear combination portfolio of a plurality of predefined investment style indices returns, each one of said investment style indices being calculated as an optimal portfolio of all listed securities satisfying corresponding investment style index criteria;

comparing by the computer server, said optimal investment portfolio with said market index portfolio in terms of risks, returns and likelihood of satisfying investment goals as specified in the received investment parameters;

based on outcome of said comparison, generating by the computer server, an alternative scenario portfolio which rebalances said the investor's existing portfolio under a preset rebalancing strategy relative to said optimal scenario portfolio in accordance with said user-defined investment parameters and market conditions,

wherein said alternative scenario portfolio forms basis for rebalancing said investor's portfolio stored in said database, and is comprised of a plurality of identified securities with associated quantity of shares to be traded;

executing trades using the computer server, for each of identified securities based upon said alternative scenario portfolio thereby rebalancing the investor's existing portfolio;

updating said investor's existing portfolio in said database with the updated rebalanced portfolio;

Claim 40. wherein said step of executing trades is performed automatically.

Claim 41. wherein said step of executing trades is performed manually.

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#### ***Allowable Subject Matter***

Claims 39-41 are allowed.

#### ***Reasons for Allowance***

The closest prior art of record relevant to the all a web-based investment claims are patent references listed below.

Peters et al. (US 20030088489) teach a web-based investment advisory system and method to assist financial advisors in delivering personalized investment advisory services to investors.

Jones (US Patent 6,021,397) teaches a system for advising a user regarding feasible and optimal portfolio allocations among a set of available financial products.

Labe, JR. et al. (US 2002/0091605) teach a method and system for generating optimal and near-optimal financial portfolios which contain a specific number of assets.

While, the prior art references listed above generally pertain to a financial portfolio management fail, they fail to teach, suggest or render obvious a method of financial portfolio management,

which comprises at least a process of rebalancing an investor's existing portfolio using an alternative scenario portfolio generated by comparing an optimal investment portfolio with a domestic market index portfolio wherein,

said optimal investment portfolio is generated based on (i) real time and historical market price data and (ii) investment parameters received from an investor, and

said domestic market index portfolio is generated as an optimal linear combination portfolio of a plurality of predefined investment style indices returns, each one of said investment style indices, in turn, being calculated as an optimal portfolio of all listed securities satisfying corresponding investment style index criteria, and

said investor's existing portfolio is rebalanced with the alternative scenario portfolio.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAGDISH PATEL whose telephone number is (571) 272-6748. The examiner can normally be reached on **800AM-630PM Mon-Tue and**

**Thu.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **KRAMER JAMES A** can be reached on **(571)272-6783**. The fax phone

number for the organization where this application or proceeding is assigned is **571-273-8300.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/JAGDISH N PATEL/  
Primary Examiner, Art Unit 3693